**IT Applications Unit 3, AOS 1, Online Communities**

1. Complete the following, from pgs, 18-28: **Network hardware and software**

**Networks are classified according to below and we will study the following:**

1. **Network Categories: LAN, WAN**
2. **Network Architecture, client-server; peer-to-peer; internet peer-to-peer; intranet**
3. **Network communication standards**
4. **Network hardware and software**
5. **Transmission media**
6. **Network security**

**Network hardware and software**

**Network Operating systems**

1. Describe the role of the network operating system.

To Control traffic on the network

1. What are the typical tasks of network server software?

It controls file access, tracks users, authenticates access to network servers, maintains log of usage and problems.

1. What is the role of network client software?

It translates the data sent allowing the user to view the data.

1. List the 3 providers of network operating systems.

Novell, Apple, Microsoft.

**Web client software**

1. List the typical client software

Web browser, E-Mail, videoconferencing, Instant messaging, Chatroom.

**Software for setting up websites**

1. Describe the role of http protocol.

Http is the standard on the internet to send and receive data on webpages written in html.

1. What is the role of web server software?

Provides content using the http protocol.

1. What is the role of a proxy server?

A proxy server is a server that acts as an intermediary for requests from clients seeking resources from other servers

* 1. What are the advantages of using a proxy server?

IT provides security, speeds up acess to resources, it also can help manages restrictions.

1. Describe the role of the following software:
   1. SMTP

Is used on electronic mail servers to handle the sending and reciving of client e-mails.

* 1. POP3

Stores an e-mail that it receives until the client is ready to accept it.

* 1. FTP

Enables the downloading and uploading of files between computers on the internet.

* 1. Web software applications

Are programs designed for use on a website and include blogging software applications, fourms and wikis.

**Cross-platform web software**

1. What is meant by a Cross-platform application? List egs.

A program that is able to run on many different operating systems by using a execution engine such as java and adobe flash.

1. What is adobe flash?

Is a software tool that enables website developers to combines interactive content with text.

**Network Hardware**

Describe the characteristics and role of the following network hardware devices:

1. Network interface card

Is used to connect a resource or computer to a network.

1. Wireless access point

A wap allows a device to connect to a network without cables through radio transmission media.

1. Switches

Is a device that stores the address of everydevice down each port leading from the switch, when a device talks to a switch the first packet is examined for the destination devices MAC address then send the message down the appropriate port.

1. Routers

A router connects several lans to make them a wan or a larger lan.

1. modems

a modem is a device that is used to send a computers digital signal over a telephone line.

For each of the following modem types, in a table indicate the following:

Modem download speed

1. dial up modem

56kbps

ii) digital modems:

* + 1. DSL

1.5mpbs

* + 1. ADSL & ADSL 2 +

20mpbs

1. cable modems

30mpbs

6 How does a digital modem differ from a dial-up modem?

It translates the data into digital form from the original analogue form.